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Andrew Kisliakov

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

LE, MIRANDA

ART UNIT

PAPER NUMBER

2167

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DELIVERY MODE

07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/748,334

Applicant(s)

KISLIAKOV, ANDREW

Examiner

Miranda Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-23,28-33,37,38,40 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 7-23, 28-33, 37-38, 40-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/10/07 has been entered.

This communication is responsive to Amendment, filed 05/10/07.

Claims 1-2, 7-23, 28-33, 37-38, 40-41 are pending in this application. In the Amendment, claims 1, 22, 37-38, 40-41 have been amended, claims 3-6, 24-27, 39, 42 have been cancelled. This action is made non-Final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2, 7-15, 17-19, 21-23, 28-33, 37, 38, 40, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. (US Patent No. 6,993,246), in view of Jones et al. (US Patent No. 6,453,355).

As to claims 1, 37, 40, Pan teaches a method of storing data, said method comprising the steps of:

storing data, as one or more data samples (*i.e. event e1, ... event e6; event f1 Event f5; See Fig. 2*), in a media file (*i.e. data stream #1, data stream #2, Fig. 2; that event was stored in the data file, col. 2, lines 58-64*) configured for use by a media player application in playing the data samples (*i.e. video playback system ... a standard media player, col. 11, lines 45-52*), (*i.e. Another aspect of the present invention involves correlating more than two data streams and storing related time-stamped event data pointers to a storage device for later retrieval. As previously mentioned, the time-stamps indicate a reference time when a particular event was detected while a corresponding data pointer indicates a location where data associated with that event was stored in the data file, col. 2, lines 58-64*);

storing, in an index file (*i.e. a data set is maintained in an index file, col. 2, lines 11-26*) associated with the media file, at least an offset value (*i.e. positional information, col. 1, line 59 to col. 2, line 5*) for each of the data samples representing a location (*i.e. positional information indicating where data associated with the events are located in a corresponding storage medium such as a digital file or where the data is located within the data stream, col. 1, line 59 to col. 2, line 5*) of each of the data samples in the media file wherein the media file further comprises additional information (*i.e. data pointer, time, See Fig. 2*) interspersed throughout the media file (*i.e. correlating data among multiple data streams based on a use of time-stamps and related*

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positional information, col. 1, lines 46-58), wherein the additional information comprises at least a timestamp (i.e. time; See Fig. 2) for each of the data samples (i.e. event e1, ... event e6; event f1 event f5; See Fig. 2), each of the timestamps (i.e. t1, t3, t10, t6, t8, t11, t2, t4, t5, t7, t9; See Fig. 2) indicating a capture time of an associated data samples (i.e. During a presentation of information at slide display device 580, an audio-video recording unit 585 captures details of, for example, a corresponding slide presentation including a lecturer delivering a speech. A data stream generated by the audio-video recording unit 585 is captured for storage in a data file at data processing unit 560, col. 10, lines 39-51).

Pan does not explicitly teach:

wherein the additional information of the media file is used in reconstructing the index file upon corruption of the index file, the reconstructive index file comprising the offset values representing the location of each of the data samples in the media file.

Jones teaches:

wherein the additional information (i.e. hint track; Each hint track sample, such as hint track sample 405--which describes how to form an RTP packet--may contain a header, and may reference some data from an associated media track, col. 10, lines 32-46) of the media file is used in reconstructing the index file (i.e. index of the data index associated with the samples that use this sample description, col. 22, lines 60-63; Therefore each media track in the movie should have an associated RTP hint track. In one embodiment of the present invention, each hint track contains a track reference back to the media track which it is streaming, col. 24, lines 18-25) upon corruption of the index file (i.e. the original media data may be removed, col. 12, lines 50-60; error correction, col. 25, lines 34-43), the reconstructive (i.e. reassemble media file, col. 8,

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lines 58-65) index file comprising the offset values (i.e. media sample offsets, See Table 5, col. 30) representing the location of each of the data samples in the media file (i.e. The immediate mode permits the insertion of payload-specific headers (e.g. the RTP H.261 header). For hint tracks where the media is sent 'in the clear', the mediasample entry may specify the bytes to copy from the media track, by giving the sample number, data offset, and length to copy. For relatively complex cases (e.g. encryption or forward error correction), the transformed data may be placed into the hint samples, and then hintsample mode may be used, which would be provided from the extradata field in the RTP sample itself, col. 25, lines 34-43).

It would have been obvious to one of ordinary skills of the art having the teachings of Pan and Jones at the time the invention was made to modify the system of Pan to include the additional information of the media file is used in reconstructing the index file upon corruption of the index file, the reconstructive index file comprising the offset values representing the location of each of the data samples in the media file, as taught by Jones.

One of ordinary skills in the art would be motivated to make this combination in order to reassemble media file in view of Jones, as doing so, it would give the added benefit of having hint tracks permitted the development of new formats for new protocols without causing compatibility issues for existing servers or local playback. In addition, new media tracks may be added over the life of the file format while maintaining backwards compatibility (col. 11, lines 63-67) as taught by Jones.

As to claims 22, 38, 41, Pan teaches a method of storing video (*i.e. video frames, col. 11, lines 45-52*) and associated text data (*i.e. textual data stream, col. 11, lines 16-34*), said method comprising the steps of:

storing the video associated text data, as one or more data samples (*i.e. event e1, ... event e6; event f1 Event f5; See Fig. 2*), in a media file in accordance with first file format (*i.e. closed captions for video or audio content, col. 11, lines 15-23*; Another aspect of the present invention involves correlating more than two data streams and storing related time-stamped event data pointers to a storage device for later retrieval. As previously mentioned, the time-stamps indicate a reference time when a particular event was detected while a corresponding data pointer indicates a location where data associated with that event was stored in the data file, col. 2, lines 58-64), the media being configured for use by a media file player application in playing the video data (*i.e. video playback system, col. 11, lines 45-52*);

storing, in a index file (*i.e. a data set is maintained in an index file, col. 2, lines 11-26*) in accordance with a second file format (*i.e. audio samples, col. 11, lines 45-52*), at least an offset value for each of the data samples (*i.e. event e1, ... event e6; event f1 Event f5; See Fig. 2*) representing a location of each of the one or more data samples in the media file (*i.e. Another aspect of the present invention involves correlating more than two data streams and storing related time-stamped event data pointers to a storage device for later retrieval. As previously mentioned, the time-stamps indicate a reference time when a particular event was detected while a corresponding data pointer indicates a location where data associated with that event was stored in the data file, col. 2, lines 58-64*); and

adding additional information (*i.e. data pointer, time, See Fig. 2*) interspersed throughout the media file (*i.e. correlating data among multiple data streams based on a use of time-stamps and related positional information, col. 1, lines 46-58*), the media file including the additional information being readable by the media player application corresponding at least to first file format (*i.e. video playback system ... a standard media player, col. 11, lines 45-52*), the additional information comprising at least a timestamp (*i.e. t1, t3, t10, t6, t8, t11, t2, t4, t5, t7, t9; See Fig. 2*) for one or more of the data samples (*i.e. event e1, ... event e6; event f1 event f5; See Fig. 2*), each of the timestamps indicating a capture time (*i.e. During a presentation of information at slide display device 580, an audio-video recording unit 585 captures details of, for example, a corresponding slide presentation including a lecturer delivering a speech. A data stream generated by the audio-video recording unit 585 is captured for storage in a data file at data processing unit 560, col. 10, lines 39-51*) of an associated data sample (*i.e. The principles of the present invention have applications beyond note taking, text entry, or a close captioning system. One example is a video surveillance system for an automobile parking lot. This example system uses multiple video cameras. One set of cameras record the automobiles and associated license plates at the entrance and exits. Another set of cameras record the parking area. In current video surveillance systems, cameras continuously record video on tape. This results in a waste of video recording media. A more efficient system would record, for example, only for a few seconds after a motion detector indicates when a car has entered or left the garage or parking space. This type of sporadic recording renders it difficult to determine where an event is recorded on a videotape. Even a time-stamped videotape must be searched for the appropriate time match, col. 13, line 62 to col. 14, line 9*).

Pan does not specifically teach:

wherein the additional information to the media file is used in reconstructing the index file upon corruption of the index file, the reconstructed index file comprising the offset values representing the locations of each of the data samples in the media file.

Jones teaches:

wherein the additional information (*i.e. hint track; Each hint track sample, such as hint track sample 405--which describes how to form an RTP packet--may contain a header, and may reference some data from an associated media track, col. 10, lines 32-46*) of the media file is used in reconstructing the index file (*i.e. index of the data index associated with the samples that use this sample description, col. 22, lines 60-63; Therefore each media track in the movie should have an associated RTP hint track. In one embodiment of the present invention, each hint track contains a track reference back to the media track which it is streaming, col. 24, lines 18-25*) upon corruption of the index file (*i.e. the original media data may be removed, col. 12, lines 50-60; error correction, col. 25, lines 34-43*), the reconstructive (*i.e. reassemble media file, col. 8, lines 58-65*) index file comprising the offset values (*i.e. media sample offsets, See Table 5, col. 30*) representing the location of each of the data samples in the media file (*i.e. The immediate mode permits the insertion of payload-specific headers (e.g. the RTP H.261 header). For hint tracks where the media is sent 'in the clear', the mediasample entry may specify the bytes to copy from the media track, by giving the sample number, data offset, and length to copy. For relatively complex cases (e.g. encryption or forward error correction), the transformed data may be placed into the hint samples, and then hintsample mode may be used, which would be provided from the extradata field in the RTP sample itself, col. 25, lines 34-43*).

It would have been obvious to one of ordinary skills of the art having the teachings of Pan and Jones at the time the invention was made to modify the system of Pan to include wherein the additional information to the media file is used in reconstructing the index file upon corruption of the index file, the reconstructed index file comprising the offset values representing the locations of each of the data samples in the media file, as taught by Jones.

One of ordinary skills in the art would be motivated to make this combination in order to reassemble media file in view of Jones, as doing so, it would give the added benefit of having hint tracks permitted the development of new formats for new protocols without causing compatibility issues for existing servers or local playback. In addition, new media tracks may be added over the life of the file format while maintaining backwards compatibility (col. 11, lines 63-67) as taught by Jones.

As to claims 2, 23, Jones teaches the additional information is used exclusively for reconstruction of the index file (*i.e. reassemble media file, col. 8, lines 58-65*).

As to claims 7, 28, Pan teaches the additional information comprises a resolution of an associated sample (*i.e. The consequences of latency depend upon the application and the desired time resolution at which queries are being made, col. 12, lines 46-55*).

As to claims 8, 29, Pan teaches the information of the index file comprises frame rate variation information (*i.e. video rate of 30 frames per second, col. 11, line 58 to col. 12, line 2*).

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As to claims 9, 30, Pan teaches the additional information is stored as one or more dedicated samples of the media file (*i.e. FIG. 3 is a graph of sample trigger events as recorded over time according to sample data in the table of FIG. 2. According to the principles of the present invention, events in one data file are indexed to events in a second data file based on time-stamps and corresponding data pointers, col. 7, lines 10-14*).

As to claims 10, 31, Jones teaches the media file is configured in accordance with the Microsoft AVI file format (*i.e. Thus, according to one embodiment of the present invention, existing legacy formats such as "au" audio files, "AVI" audio/video files, col. 11, lines 14-29*).

As to claims 11, 32, Jones teaches the index file is configured in accordance with the Apple QuickTime file format (*i.e. QuickTime files, col. 11, lines 14-29*).

As per claim 12, Pan teaches the data is video data (*i.e. video frames, col. 11, lines 45-52*).

As per claim 13, Pan teaches the data is text data (*i.e. textual data stream, col. 11, lines 16-34*).

As per claim 14, Pan teaches the data is video data and associated text data (*i.e. closed captions for video or audio content, col. 11, lines 16-23*).

As to claims 15, 33, Pan teaches the video and associated text data are captured for security purposes (*i.e. The principles of the present invention have applications beyond note taking, text entry, or a close captioning system. One example is a video surveillance system for an automobile parking lot. This example system uses multiple video cameras. One set of cameras record the automobiles and associated license plates at the entrance and exits. Another set of cameras record the parking area. In current video surveillance systems, cameras continuously record video on tape. This results in a waste of video recording media. A more efficient system would record, for example, only for a few seconds after a motion detector indicates when a car has entered or left the garage or parking space. This type of sporadic recording renders it difficult to determine where an event is recorded on a videotape. Even a time-stamped videotape must be searched for the appropriate time match, col. 13, line 62 to col. 14, line 9).*

As per claim 17, Jones teaches a plurality of copies of a corresponding text string (*i.e. text sample, col. 27, lines 18-29*) are included in each text sample of the media file (*i.e. In the QuickTime file format, a track may be added to the movie by updating or copying and augmenting the meta-data. If the media data is in files separate from the meta-data, or optimized interleave is not required, this can be a relatively simple and efficient operation, col. 11, lines 44-49).*

As per claim 18, Jones teaches a first copy of the text string (*i.e. text sample, col. 27, lines 18-29*) is configured in accordance with the AVI file format (*i.e. Thus, according to one*

embodiment of the present invention, existing legacy formats such as "au" audio files, "AVI" audio/video files, col. 11, lines 14-29).

As per claim 19, Jones teaches a second copy of the text string (*i.e. text sample, col. 27, lines 18-29*) is configured in accordance with the QuickTime file format (*i.e. In the QuickTime file format, a track may be added to the movie by updating or copying and augmenting the meta-data. If the media data is in files separate from the meta-data, or optimized interleave is not required, this can be a relatively simple and efficient operation, col. 11, lines 44-49*).

As per claim 21, Jones teaches the index file contains a track referencing at least the media file (*i.e. a hint track, col. 7, lines 47-64*).

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. (US Patent No. 6,993,246), in view of Jones et al. (US Patent No. 6,453,355), and further in view of Obrador (US Patent No. 7,149,755).

As per claim 16, Pan and Jones do not specifically teach each video sample is a separate JPEG file.

Obrador teaches each video sample is a separate JPEG file (*i.e. a motion JPEG compression format for audio/video works, col. 3, line 50 to col. 4, line 14*).

It would have been obvious to one of ordinary skills of the art having the teachings of Pan, Jones, and Obrador at the time the invention was made to modify the system of Pan, and Jones to include each video sample is a separate JPEG file as taught by Obrador.

One of ordinary skills in the art would be motivated to make this combination in order to transmit the requested digital content to the user in a format that is suitable for rendering by a computer, a wireless device, or a voice device (*col. 3, line 50 to col. 4, line 14*) in view of Obrador, as doing so would give the added benefit of allowing a user to organize and browse through a selected collection of media objects by means of a set of links between media objects (*col. 4, line 65 to col. 5, line 8*) as taught by Obrador.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. (US Patent No. 6,993,246), in view of Jones et al. (US Patent No. 6,453,355), and further in view of Boogaard (US Pub. No. 20030033325).

As per claim 20, Pan and Jones do not specifically teach the step of inserting one or more empty samples into the media file to compensate for any missed samples.

Boogaard teaches comprising the step of inserting one or more empty samples into the media file to compensate for any missed samples (*i.e. The available empty frame(s) is or are available because the first next normal frame may need the space in the empty frame(s) to store data (bit reservoir), [0101]*).

It would have been obvious to one of ordinary skill of the art having the teaching of Pan, Jones and Boogaard at the time the invention was made to modify the system of Pan and Jones to include the step of inserting one or more empty samples into the media file to compensate for any missed samples as taught by Boogaard.

One of ordinary skill in the art would be motivated to make this combination in order to avoid possible additional frames for a bit reservoir from being counted in the time coding of the

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file in view of Boogaard ([0101]), as doing so would give the added benefit of pertaining more efficient distribution of unique audio and/or *video* files by combining the invention with the "client as server" principle, which uses (partial) recording of audio and/or *video* at the side of the individual user, while maintaining a method of control of the server as taught by Boogaard ([0029]).

Response to Arguments

5. Applicant's arguments regarding the prior arts do not suggest a method for storing data as recited in amended independent claims 1, 22, 37, 38, 40, 41 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Miranda Le
July 18, 2007

A handwritten signature in cursive script, appearing to read "Miranda Le", with a long horizontal flourish extending to the right.